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Northern Electric
COMPANY LIMITED

Fifty-Second Annual Report



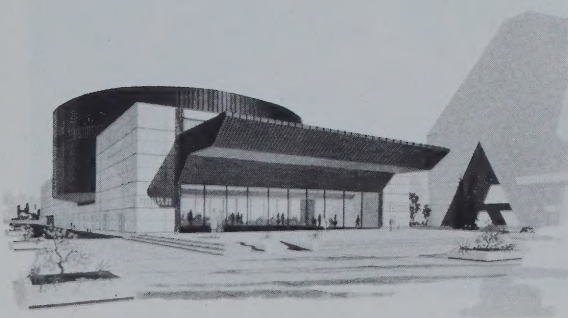
1965



This antenna, designed by R & D for research work in the field of satellite communications, was installed at the Defence Research Telecommunications Establishment near Ottawa.

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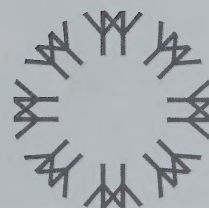
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Telephone Pavilion: A project for expo67
sponsored by The Telephone Association of Canada.

**The 1967
World Exhibition**

April 28—Oct. 27, 1967



Bell-Northern Teams at Work

Employees of The Bell Telephone Company of Canada and Northern Electric Company, Limited work together to design and produce quality materials and equipment for the telephone industry.



Upper left: The Product Planning Committee, made up of three representatives from each company, meets at Northern's Research and Development Laboratories, Ottawa.

Upper right: A Bell rigger (yellow hat) and a Northern installer (red hat) at the foot of a microwave tower.

Lower: Northern and Bell members of the Quality Assurance Group in session at Lachine Works.

A Canadian owned Company and one of the world's leading telecommunications manufacturers

DIRECTORS

PAUL BIENVENU

President

Catelli Food Products Limited

*R. DICKSON HARKNESS, D.S.O., M.C.

Director of other prominent

Canadian Companies

FREDERICK JOHNSON

Director of other prominent

Canadian Companies

*R. HOLLEY KEEFLER, C.B.E., D.S.O.

HERBERT H. LANK

Chairman of the Board

Du Pont of Canada Limited

ALEXANDER G. LESTER

Executive Vice-President

The Bell Telephone Company of Canada

*VERNON O. MARQUEZ

J. ANGUS OGILVY, Q.C.

Senior partner of the firm of Howard, Cate,

Ogilvy, Bishop, Cope, Porteous & Hansard

*CYRIL A. PEACHEY

GÉRARD PLOURDE

President

United Auto Parts Inc.

*MARCEL VINCENT

President

The Bell Telephone Company of Canada

EDWARD C. WOOD

Director of other prominent

Canadian Companies

**Members of the Executive Committee*

OFFICERS

R. HOLLEY KEEFLER, C.B.E., D.S.O.

President and Chairman of the Board

CYRIL A. PEACHEY

Executive Vice-President, Planning

VERNON O. MARQUEZ

Executive Vice-President, Operations

FRASER F. FULTON, O.B.E.

Vice-President, Administration

NORMAN H. MARTIN, M.B.E.

Vice-President and Treasurer

A. BREWER HUNT

Vice-President,

Research and Development

GASTON R. BOYER

Vice-President and Comptroller

JOHN R. HOUGHTON

Vice-President and General Manager,

Equipment Division

JACK G. LITTLE

Vice-President and General Manager,

Switching Division

W. D. E. ANDERSON

Vice-President and General Manager,

Apparatus Division

W. RITCHIE JOHNSTON

Vice-President and General Manager,

Marketing Service Division

ANDREW C. KOVATS

Vice-President and General Manager,

International Operations Division

JOHN G. HARPER

Secretary

Consolidated Results in Brief

	1965	1964
Sales.....	\$358,143,198 <i>up 9%</i>	\$328,113,888
Income Taxes.....	2,891,000	8,492,000
Net Earnings.....	7,960,799 <i>down 21%</i>	10,098,888
Per Share.....	7.86	9.97
Dividends.....	6,581,250	5,720,625
Per Share.....	6.50	5.65
Capital Expenditures.....	15,339,085	12,774,497
Working Capital.....	93,130,433	92,457,968
Employees (31 December)	19,632	18,066

Report of the Directors to the Shareholders for the Fifty-second Year of Operations Ended 31 December 1965

(In the 1965 Annual Report, financial information pertaining to subsidiary companies has been consolidated with Northern Electric Company, Limited and all figures for previous years, quoted for comparison purposes, have been changed to the same basis).

Installation of electronic switching equipment, to provide service for EXPO 67, in progress at the Bell Telephone Company's Belmont Building in Montreal.

16 February 1966



Results

The expansion of the Canadian economy in 1965 was at a rate exceeding that suggested as an average annual growth rate target by the Economic Council of Canada in its first annual review. Northern's business also expanded at a faster rate than had been forecast in 1964. As mentioned later in this report, this growth was partly the result of a deliberate plan of keying company activities to the targets suggested by the Economic Council.

The value of consolidated sales in 1965 at \$358,143,198 again reached a new record, up 9.2% from 1964.

Consolidated earnings at \$7,960,799, were lower than 1964, mainly because of rapid acceleration of new product introduction, work on large projects which have not yet become revenue producing and the effect of holding the line on prices.

Dividends for the year amounted to \$6,581,250 at the rate of \$6.50 per share on 1,012,500 shares.

Research and Development

Research and development work was intensified in response to the demand from customers for improved services and new products. New branch laboratories were established in Toronto and Montreal for better integration of product development and manufacturing design. In these branches more than 500 scientific and supporting staff now come under the direct supervision of the main Laboratories in Ottawa.

To meet anticipated needs in the field of switching, a new electronic system is under development. This system is being developed to meet the specific requirements of medium sized communities where a larger electronic switching system would not be economical.

As a result of the wide acceptance of the MA-4 coaxial cable carrier put into service for the first time last year, development work is continuing to improve its flexibility and expand the number of channels.

Engineering and Manufacturing

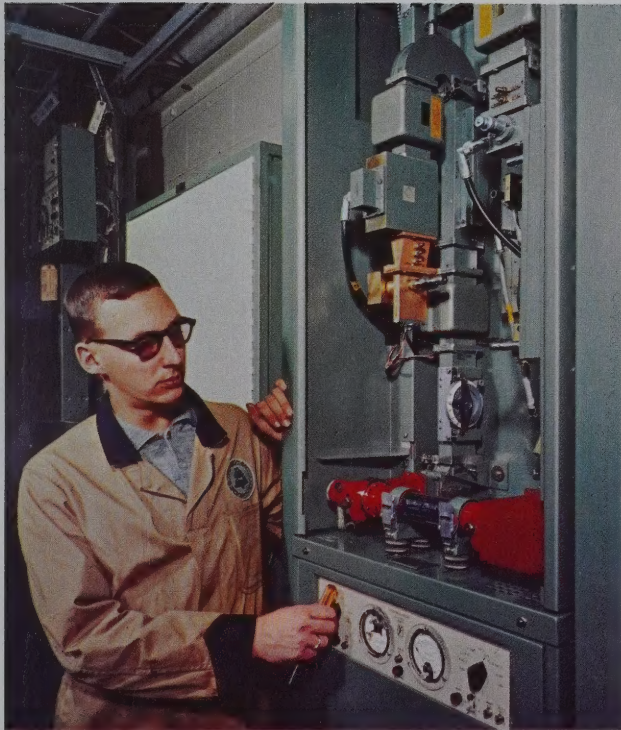
The Advanced Devices Centre in Ottawa was completed and occupancy began in November. Transfer of facilities from other locations to the new Centre will be completed by the spring of 1966. This Centre is also preparing to produce micro circuits and thin film devices needed for many of the new product designs.

New machinery in the Cable Division to use Canadian paper pulp instead of imported paper ribbon for insulation of communication cable conductors will be in full production during 1966. New and fully automated equipment for producing thermoplastic insulating materials came into production during the year.

Copper continued in short supply without any relief being apparent for the immediate future. It was necessary to obtain a proportion of the Company's copper requirements from refined scrap at premium prices.

The Research and Development Laboratories were honoured with a visit by the Shah of Iran who expressed great interest in the work being done. With the Shah is A. B. Hunt (left) Vice-President, Research and Development and R. H. Keefer, President and Chairman of the Board.





New Products

The equipment manufactured by Montreal and Toronto Works for the first electronic switching office in Canada was shipped to the Bell Telephone Company's Belmont Building in Montreal for installation. This new office will be cut-over to provide service for EXPO 67. Production is already under way for the second office to be installed for the Bell Telephone Company in Toronto.

An improved microwave system—the RA-1—designed by the R. & D. Laboratories, was manufactured during the year and the first installation is in operation between Montreal and Sherbrooke. This new system increases substantially the number of possible conversations per radio circuit along with improved reliability and maintenance.

Upper: A panel of the RA-1 Microwave system in use at the Montreal terminal of the Montreal-Sherbrooke link.

Lower: A product display by our agent Electro-Industrial Halven, Caracas, Venezuela.

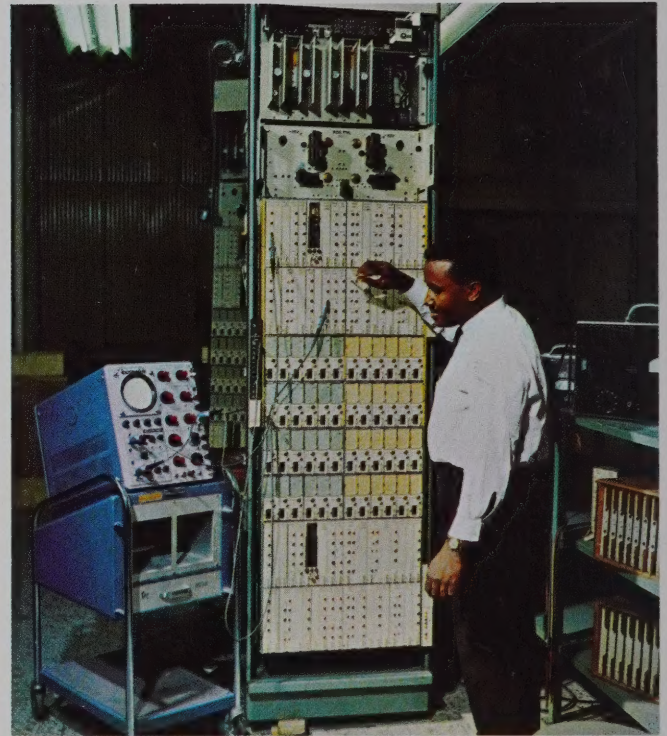


Development of the N.E. T1 Pulse Code Modulation Carrier System was completed and a substantial number of systems were manufactured and installed. In Pulse Code Modulation a new transmission technique is applied to cables in metropolitan centres to permit a substantially higher number of conversations per pair of wires.

Specially designed tropicalized telephone sets, produced at London Works, were shipped to Costa Rica where they are being installed.

An order was received for the master control for the Canadian Broadcasting Corporation at EXPO 67. Design has begun and the system will be manufactured and installed in 1966.

Two 69,000-volt oil-filled pipe cables supplied to Prince George Pulp & Paper Co. Ltd. are the first industrial application of this cable system in Canada.



Upper: This Pulse Code Modulation system, shown here being tested, will provide 24 conversations over two pairs of wires.

Lower: Installation of 69,000-volt oil-filled pipe cable at Prince George, British Columbia.



Marketing

In collaboration with The Bell Telephone Company of Canada, the Marketing Service Division introduced a new ordering system designed to link Bell Telephone storerooms by dataphone with computer facilities in Northern Electric Telephone Distributing Houses. The new system will expedite order servicing by mechanizing many of the processes formerly carried out manually.

Defence sales efforts were re-organized under the Marketing Service Division and a Defence Liaison Manager appointed with headquarters in Ottawa. It is expected that the new organization will permit closer technical association with the Armed Services and with Government Agencies engaged in procuring products and systems for defence purposes.

A new artificial hand for children is being developed by the Montreal Rehabilitation Institute. Northern Electric scientists are co-operating by adapting miniaturized electronic components for this new application. A model of the new hand is compared with the Russian-designed hand now in use by the Institute.

International Operations

Much work was done in 1965 on proposals for large communication projects in the Near East and in South America. Orders continue to be obtained for cable and communication equipment from many parts of the world. The value of international sales reached a total of \$13,961,903 for the year.

Prospects

The national targets set out in the First Annual Review of the Economic Council of Canada have been used to develop business goals for the Company up to 1970. These goals, expressed in terms of sales, productivity, employment, capital needs and profitability are ambitious and are being used by Company people as a stimulus towards improved performance.

New orders received during 1965 were at a high level and orders on hand at 31 December 1965 amounted to \$116,771,000, some \$21.4 million higher than a year ago. The 1966 forecast is for continued growth.



Directors and Officers

Thomas W. Eadie, Chairman of the Board of The Bell Telephone Company of Canada, resigned as a director. Your directors recorded their appreciation of his outstanding contribution as a director for 12 years.

Marcel Vincent, President of The Bell Telephone Company of Canada, was elected a director to fill the vacancy caused by Mr. Eadie's resignation.

C. B. Woodley, Vice-President and General Manager, Apparatus Division, and W. D. E. Anderson, Vice-President and General Manager, Toll Area, of The Bell Telephone Company of Canada, interchanged positions. This exchange is part of a program to broaden the experience of senior people in both companies.

In keeping with the rapid growth and complexity of transmission equipment and switching systems manu-

factured by the Company, the Equipment Division was divided by giving Toronto Works a separate identity as the Switching Division. J. G. Little, formerly Vice-President and General Manager, Cable Division, was appointed Vice-President, Ontario, and General Manager of the new division. R. C. Smythe was appointed General Manager, Cable Division.

People

On 31 December 1965 there were 19,632 people employed by the Company. Your directors extend their appreciation to all employees for their efforts during the past year, when the Company was faced with a rapidly increasing demand for new and more complex products.

For the Directors



Chairman

New type telephone sets in course of production at London Works.



Five-year Review

(Millions of Dollars)

	1965	1964	1963	1962	1961
Earnings and Related Data					
Total Sales.....	358.1	328.1	314.8	293.7	248.5
Sales of Company Manufactured Products.....	249.6	232.3	223.6	206.9	177.3
Income from Investments.....	.3	.8	.5	.1	.5
Provision for Depreciation.....	6.4	7.4	8.0	6.8	6.3
Interest Charges.....	1.9	1.9	2.0	1.2	1.0
Provision for Income Taxes.....	2.9	8.5	8.0	8.2	5.7
Net Earnings for the Year.....	8.0	10.1	8.4	8.8	5.4
Earnings per Share (Dollars)*.....	7.86	9.97	8.30	8.70	5.32
Dividends per Share (Dollars)*.....	6.50	5.65	5.20	4.40	4.00

*1961-1963 adjusted to 1964 issued-shares basis

Financial Position at 31 December

Working Capital.....	93.1	92.5	91.1	91.2	74.4
Plant and Equipment (at cost).....	146.3	132.4	120.9	112.3	100.5
Accumulated Depreciation.....	87.7	82.4	76.1	72.9	66.3
Capital Expenditures.....	15.3	12.8	9.9	13.0	10.9
Long-term Debt.....	36.2	37.7	39.0	40.2	21.5
Shareholders' Equity.....	98.5	93.7	89.3	84.2	80.5

Employment Data

Total Employment Costs.....	119.1	107.2	100.1	98.4	85.9
Employees (31 December).....	19,632	18,066	16,953	17,018	16,213

Financial Review

16 February 1966

Operating Results

The Company's consolidated sales of all products for 1965 totalled \$358,143,198, of which 70% consisted of products manufactured by the Company.

Sales to The Bell Telephone Company of Canada totalled \$181,837,254, an increase of \$8,768,173 over the previous year. Sales to other Canadian customers totalled \$162,344,041, an increase of \$20,698,616 and export sales reached a new high of \$13,961,903.

Net consolidated earnings for the year amounted to \$7,960,799 and were equivalent to \$7.86 per share. The profits arising from increased sales were partially offset by the effect for a full year of the substantial price reductions made to our customers during the course of the

previous year. The introduction by the Company of a wide range of new products resulted in increased manufacturing and marketing costs chargeable against this year's operations.

Income Taxes amounted to \$2,891,000 and were at a lower rate than in 1964 due to increased tax incentive benefits resulting from higher scientific research expenditures.

Working Capital

Working Capital at 31 December 1965 totalled \$93,130,433, an increase of \$672,465 over the previous year. The following is a comparative statement of source and application of funds:

Source of Funds

	1965	1964
Total Sales	\$358,143,198	\$328,113,888
Less: Expenses requiring Funds	341,263,439	302,372,232
Income Taxes	2,891,000	8,492,000
Net Flow from Operations	13,988,759	17,249,656
Deferred Credit for Taxes	6,375,496	3,742,000
Adjustment of Prior Years' Income Taxes	3,426,071	—
Other	49,750	60,451
	23,840,076	21,052,107

Application of Funds

Expenditures for Plant and Equipment (Net)	15,057,361	12,667,884
Reduction in Long-term Debt	1,529,000	1,251,000
Dividends paid to Shareholders	6,581,250	5,720,625
	23,167,611	19,639,509
Increase in Working Capital	672,465	1,412,598

Financial Review *cont'd*

Long-term Debt

Under the Sinking Fund Provisions further redemptions were made in 1965 of \$251,000, Series A, 3¼% First Mortgage Bonds and \$1,000,000 4½% Debentures.

Capital Expenditure

Investment in new plant and equipment during the year amounted to \$15,339,085, bringing the total investment in plant to \$146,279,632.

Major additions included a building and facilities for the Advanced Devices Centre at Ottawa, and a building extension for the Research and Development Branch Laboratory at London. Equipment was added to effect a major expansion in the manufacture of communication cable at Lachine. Further facilities were added for the manufacture of a variety of new products and to reduce manufacturing costs.

Employment Costs

Total employment costs, at \$119,067,576 for the year, reflected increases in employee numbers and in rates of

pay. Included in total employment costs are the following supplementary employee benefits:

Payments to Pension Trust Fund . .	\$5,495,068
Sickness and Accident Benefits . . .	1,205,342
Death Benefits	363,555
Disability Pensions	28,141

Service pensions are paid out of the Pension Trust Fund established with the Montreal Trust Company, Montreal, as trustee, set up and maintained to provide for current and future service pensions. The fund is irrevocably committed to service pension purposes. Under an accrual program based on actuarial studies, regular payments are made to the fund by the Company. The fund is not a part of the assets of the Company and is therefore not reflected in the Balance Sheet.

As of 31 December 1965, there were 859 former employees on pension.

Consolidated Balance Sheet

as at 31 December 1965

(With Comparative Figures as at 31 December 1964)

Assets

Current

	1965	1964
Cash	\$ 81,197	\$ 3,328,995
Marketable Securities (Note 2)	60,750	10,597,914
Accounts Receivable		
—Affiliated Companies	26,499,335	19,249,427
—Other	30,613,029	24,105,339
Inventories (Note 3)	78,010,540	70,000,720
Prepaid Expense	603,583	522,445
	<u>135,868,434</u>	<u>127,804,840</u>

Investment in Shares of Associated Company (at Cost)	355,000	375,000
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Plant and Equipment (at Cost)

Land and Buildings	41,671,865	39,621,775
Machinery and Equipment	104,607,767	92,735,224
	<u>146,279,632</u>	<u>132,356,999</u>

Less:

Accumulated Depreciation	87,659,102	82,418,870
	<u>58,620,530</u>	<u>49,938,129</u>
	<u>\$194,843,964</u>	<u>\$178,117,969</u>

The notes attached to the Financial Statements are an integral part thereof.

Approved on behalf of the Board { R. H. Keebler, Director
Edward C. Wood, Director

Liabilities

	1965	1964
Current		
Due to Banks.	\$ 9,271,173	\$ —
Accounts Payable and Accrued Liabilities		
—Affiliated Company.	157,358	116,748
—Other.	31,462,864	25,211,249
Taxes Payable (Note 1)	817,606	9,767,875
Sinking Fund Deposits due within one year (Note 4)	1,029,000	251,000
	<u>42,738,001</u>	<u>35,346,872</u>
Long-term Debt (Note 4)	36,209,000	37,738,000
Deferred Credit—Taxes		
Applicable to Future Years (Note 1)	12,262,045	5,886,549
Accumulated Provisions (Note 5)	5,100,000	5,447,000
	<u>96,309,046</u>	<u>84,418,421</u>
Shareholders' Equity (Note 6)		
Capital Stock (Note 7)		
Authorized—1,500,000 shares of no par value		
Issued—1,012,500 shares.	33,975,000	33,975,000
Retained Earnings	60,659,918	55,824,548
Contingency Reserve	3,900,000	3,900,000
	<u>98,534,918</u>	<u>93,699,548</u>
	<u><u>\$194,843,964</u></u>	<u><u>\$178,117,969</u></u>

G. R. Boyer, C.A., Vice-President and Comptroller

Submitted with our report dated 11 February 1966.

Touche, Ross, Bailey & Smart, *Chartered Accountants.*

Consolidated Statement of Earnings

For the Year Ended 31 December 1965

(With Comparative Figures for the Year Ended 31 December 1964)

	1965	1964
Sales.....	\$358,143,198	\$328,113,888
Cost of Sales including selling, general administrative expense and transfer in 1965 from Accumulated Provisions of \$347,000..	345,681,469	308,391,965
Earnings from Operations*.....	12,461,729	19,721,923
Income from Investments.....	282,255	765,994
	12,743,984	20,487,917
Interest Charges:		
Mortgage Bonds and Debentures.....	1,843,337	1,884,523
Miscellaneous.....	48,848	12,506
	1,892,185	1,897,029
Earnings before Income Taxes.....	10,851,799	18,590,888
Provision for Income Taxes (Note 1).....	2,891,000	8,492,000
Net Earnings for the Year.....	\$ 7,960,799	\$ 10,098,888
(*) After deducting the following:		
Depreciation on Plant and Equipment.....	\$ 6,374,960	\$ 7,414,762
Remuneration paid to Directors including salaries of Directors who are also Company officers....	210,400	192,600

The notes attached to the Financial Statements are an integral part thereof.

Consolidated Statement of Retained Earnings

For the Year Ended 31 December 1965

(With Comparative Figures for the Year Ended 31 December 1964)

	1965	1964
Retained Earnings at Beginning of Year	\$55,824,548	\$71,635,834
Add: Net Earnings for the Year	7,960,799	10,098,888
	<u>63,785,347</u>	<u>81,734,722</u>
Deduct: Dividends Paid	6,581,250	5,720,625
	<u>57,204,097</u>	<u>76,014,097</u>
Deduct: Stock Dividend of One Additional Share for each four shares held	—	20,250,000
	<u>57,204,097</u>	<u>55,764,097</u>
Add: Adjustment of Prior Years' Income Taxes (Note 1)	3,426,071	—
Discount on purchase of 4½% Sinking Fund Debentures	29,750	60,451
Retained Earnings at End of Year	<u>\$60,659,918</u>	<u>\$55,824,548</u>

The notes attached to the Financial Statements are an integral part thereof.

Notes to the Consolidated Financial Statements

Note 1—Income Taxes

The Provision has been reduced as a result of claiming special allowances for scientific research expenditures incurred in 1965. As a result of claiming capital cost allowances in excess of depreciation recorded at straight line rates, \$4,197,000 has been credited to Deferred Credit—Taxes Applicable to Future Years. A refund of 1964 taxes amounting to \$1,306,000 is being claimed.

To give effect to anticipated recognition for income tax purposes of special allowances for scientific research expenditures incurred in the years 1962 to 1964, and of additional capital cost allowances claimed on plant and equipment acquired for scientific research purposes in the years 1961 to 1964, \$3,426,071 was transferred from Taxes Payable to Retained Earnings and \$2,066,246 from Taxes Payable to Deferred Credit—Taxes Applicable to Future Years, respectively. In addition, a tax reduction of \$112,250, resulting from retroactive legislation, was transferred from Taxes Payable to Deferred Credit—Taxes Applicable to Future Years.

Note 2—Marketable Securities

Includes shares, bonds and notes valued at cost (including amortization of discounts and premium on bonds and notes) and accrued interest.

Market Value—1965	\$ 54,000
1964	\$10,611,788

Note 3—Inventories

Based on physical inventory as at 30 September 1965 and 1964 (valued at cost or market, whichever was lower, except copper in raw material and work-in-process which was valued on a base-stock method), adjusted for operations to 31 December 1965 and 1964.

Notes to the Consolidated Financial Statements *cont'd*

Note 4—Long-term Debt

		1965		1964
First Mortgage Sinking Fund Bonds, Series "A" 3¼%, due 2 January 1967				
Authorized and Issued.....		\$ 6,000,000		\$ 6,000,000
Less: Redeemed under Sinking Fund Provisions.....	\$ 3,262,000		\$ 3,011,000	
Sinking Fund Instalments included in Current Liabilities due 2 January 1966 and 1965.....	260,000		251,000	
due 1 October 1966.....	269,000	3,791,000	—	3,262,000
		<u>2,209,000</u>		<u>2,738,000</u>
4½% Sinking Fund Debentures, due 1 November 1976				
Authorized and Issued.....		20,000,000		20,000,000
Less: Redeemed under Sinking Fund Provisions.....	5,000,000		4,000,000	
Debentures held for Sinking Fund Instalment due 1 November 1966 and 1965.....	500,000		1,000,000	5,000,000
Balance of Instalment due 1 November 1966 included in Current Liabilities.....	500,000	6,000,000		
		<u>14,000,000</u>		<u>15,000,000</u>
5½% Sinking Fund Debentures, 1962 Series, due 15 December 1982				
Authorized and Issued.....		20,000,000		20,000,000
		<u>\$36,209,000</u>		<u>\$37,738,000</u>

Note 5—Accumulated Provisions

	1965	1964
Deferred Profit on Incomplete Contracts.....	\$ 779,000	\$ 765,000
Equalization of Research and Development Expense.....	1,402,000	1,763,000
Pensioners' Death Benefits.....	2,919,000	2,919,000
	<u>\$ 5,100,000</u>	<u>\$ 5,447,000</u>

Note 6—Shareholders' Equity

The Trust Agreements governing the Company's \$20,000,000 4½% Sinking Fund Debentures and \$20,000,000 5½% Sinking Fund Debentures, 1962 Series, impose a restriction on distribution to or for the account of its shareholders whereby no distribution may be made which will reduce the aggregate of the Capital and Consolidated Retained Earnings below \$37,500,000.

Note 7—Capital Stock

The Company has contracted to issue 100,000 shares of No Par Value Capital Stock at a price of \$100 per share, such issue to be made not later than 31 March 1966.

Note 8—Contingent Liability

Municipal and School Taxes amounting to \$920,131 are in dispute.

TOUCHE, ROSS, BAILEY & SMART

HALIFAX
QUEBEC
MONTREAL
TORONTO
LONDON
REGINA
NORTH BATTLEFORD
EDMONTON
SAINT JOHN
CAP DE LA MADELEINE
OTTAWA
HAMILTON
WINNIPEG
SASKATOON
CALGARY
VANCOUVER
VICTORIA

CHARTERED ACCOUNTANTS

ROYAL BANK BUILDING
PLACE VILLE MARIE
MONTREAL 2, CANADA
CABLE ADDRESS: "TROBAS"

UNITED STATES OF AMERICA
GREAT BRITAIN
AND OTHER COUNTRIES
THROUGHOUT THE WORLD

AUDITORS' REPORT TO THE SHAREHOLDERS

Northern Electric Company, Limited,
Montreal, Que.

We have examined the consolidated balance sheet of Northern Electric Company, Limited as at 31 December 1965 and the related consolidated statements of earnings and retained earnings for the year ended on that date. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion the accompanying consolidated balance sheet and related consolidated statements of earnings and retained earnings present fairly the financial position of the companies as at 31 December 1965 and the results of their operations for the year ended on that date, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Touche, Ross, Bailey & Smart

Chartered Accountants.

Montreal, Que.,
11 February 1966.

Products Manufactured by Northern Electric Company, Limited

Telephone Switching Systems

Automatic Telephone Exchanges
Community Dial Offices
Private Telephone Switchboards

Transmission Systems

Microwave Radio
Tropospheric Scatter
Satellite Ground Stations
Carrier, Multiplex and Telegraph Systems
Loading Coils

Telephone Sets

Residential Telephone Sets and Apparatus
Public Telephone Sets and Booths
Key Telephone Sets and Systems
Business Interphones
Telephone Apparatus

Wires and Cables

Telecommunication Wires and Cables
Power Wires and Cables

Television and Broadcast Routing Systems

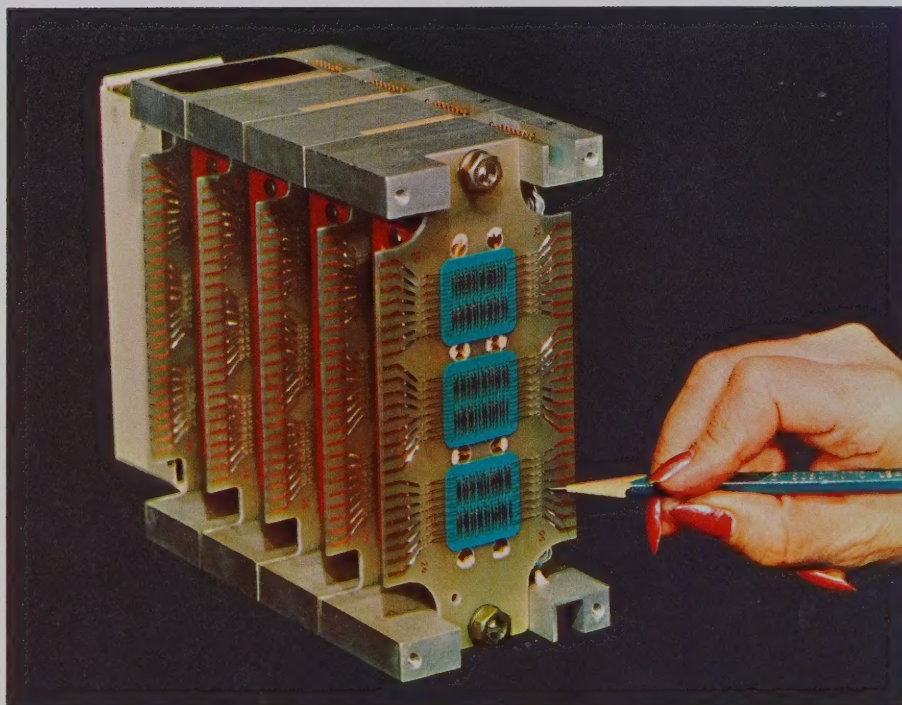
Audio Equipment
Video Routing Equipment

Teletypewriter Equipment and Data Sets

Radar and Airborne Navigational Systems

Parametric Amplifiers

Semiconductor and Ferrite Devices



This is a 52,000 bit memory unit as used in the Call Store of the Electronic Switching System being built for EXPO 67, and other applications. This unit is the heart of this newly developed switching facility. Some interesting features of Electronic Switching are: you may (a) dial frequently called numbers by the use of one or two digits, (b) have your telephone calls follow you when you are away from home, and (c) add a third party to the line simply by dialing a number.

Research and Development Laboratories Ottawa, Ontario

Branch Laboratories Lachine, Quebec; London, Ontario; Montreal, Quebec.

Plant Locations

Belleville, Ontario
 Brampton, Ontario
 Lachine, Quebec
 London, Ontario
 Montreal, Quebec

Ottawa, Ontario
 Town of Mount Royal, Quebec
 Saint John, New Brunswick
 St. Laurent, Quebec
 Toronto, Ontario

Sales Offices and Warehouses

St. John's, Newfoundland
 Moncton, New Brunswick
 Saint John, New Brunswick
 Halifax, Nova Scotia
 Sydney, Nova Scotia
 Montreal, Quebec
 Quebec, Quebec
 Chicoutimi, Quebec
 Sherbrooke, Quebec
 St. Leonard, Quebec
 Trois-Rivières, Quebec
 Ottawa, Ontario
 Toronto, Ontario
 Hamilton, Ontario
 St. Catharines, Ontario
 Kitchener, Ontario
 Kirkland Lake, Ontario
 London, Ontario

Windsor, Ontario
 Sarnia, Ontario
 Sudbury, Ontario
 Fort William, Ontario
 Sault Ste. Marie, Ontario
 Winnipeg, Manitoba
 Regina, Saskatchewan
 Saskatoon, Saskatchewan
 Edmonton, Alberta
 Calgary, Alberta
 Vancouver, British Columbia
 Victoria, British Columbia
 Vernon, British Columbia
 Trail, British Columbia
 Dawson Creek, British Columbia
 Prince George, British Columbia
 Kamloops, British Columbia

Back Cover Picture: Micro circuit with encapsulation cut away.
 Long dimension—three quarters of an inch.

